

Amendments to the Specification

Please replace the original title of this application with: BACKPLANE FOR INDUSTRIAL COMPUTERS

Please replace the paragraph beginning at page 4, line 4 with the following paragraph:

In accordance with an aspect of the present invention, there is provided ~~an improved~~ a modular backplane ~~having a low profile bridge module~~ for an industrial computer[[s]], in which the modular backplane comprises a first modular backplane segment, a second modular backplane segment and a bridge module ~~bridging the first and second backplane segments~~. The first modular backplane segment includes a first front side and a first back side, in which the first front side has a plurality of slots, and the first back side has a first dedicated connector. The second modular backplane segment includes a second front side and a second back side, in which the second front side has a plurality of slots, and the second back side has a second dedicated connector. The first and second dedicated connectors are provided in an area where no slot is formed. The bridge module includes ~~a circuit board, a bridging integrated circuit, and~~ a pair of connectors. One of the bridge connectors is engaged with the first dedicated connector and the other is engaged with the second dedicated connector, such that the ~~two~~ first and second modular backplane segments ~~can be~~ are connected to each other communicatively.

Please replace the paragraph beginning at page 5, line 3 with the following paragraph:

In accordance with a further aspect of the present invention, there is provided ~~an improved a~~ modular backplane ~~having a low profile bridge module~~ for an industrial computer[[s]], in which the modular backplane ~~generally~~ comprises a plurality of modular backplane segments and a plurality of bridge modules ~~for bridging the modular backplane segments~~. Each modular backplane segment includes a front side and a back side, in which the front side has a plurality of slots, and the back side has a primary dedicated connector and a secondary dedicated connector. The primary and secondary dedicated connectors are provided in an area where no slot is formed. Each bridge module includes ~~a circuit board, a bridging integrated circuit, and~~ a pair of connectors. One of the bridge connectors is engaged with the primary dedicated connector and the other is engaged with the secondary dedicated connector in its neighboring segments, and vice versa, such that all the modular backplane segments are communicatively connected ~~with another~~.

Please add the following paragraph before the paragraph beginning at page 7, line 1:

In accordance with a further aspect of the present invention, there is provided a monolithic backplane for an industrial computer, which includes: a first backplane segment having a first front side and a first back side, the first front side including a plurality of slots, the first back side including a first dedicated connector; a second backplane segment having a second front side and a second back side, the second front side including a plurality of slots, the second back side including a second dedicated connector; a bridge module having two connectors, one of which is engaged with the first dedicated connector and the other is engaged with the second dedicated connector, thereby communicatively connecting the first and second backplane

segments. The first and second dedicated connectors are provided in an area where no slot is formed.

Please replace the paragraphs beginning at page 8, line 10 and ending at page 8, line 13 with the following paragraphs:

Figure 8B is a frontal elevation view of the portion indicated by B in the Figure 5; ~~and~~

Figure 9 is a schematic plan view of the back side of a monolithic backplane in accordance with the present invention; and

Figure 10 is a schematic plane view showing an embodiment of the modular backplane of Figures 3 and 6.

Please add the following two paragraphs before the paragraph beginning at page 12, line 19 and ending at page 12, line 22:

Figure 10 shows an embodiment of the modular backplane of Figures 3 and 6. In Figure 10, the back side of a modular backplane 300 is illustrated. The modular backplane 300 includes a plurality of modular backplane segments 302_i, and a plurality of bridge modules 304_j. In Figure 10, four modular backplane segments 302_i (i=1, 2, 3, 4) and three bridge modules 304_j (j=1, 2, 3) are illustrated as an example.

Each modular backplane segment 302_i may be similar to that of Figure 3 or Figure 6. The front side of each modular backplane segment 302_i has a plurality of slots (not shown). The back side of each modular backplane segment 302_i has primary and secondary dedicated connectors (e.g. 126 and 146 of Figure 3, 226 and 246 of Figure 6).

The bridge module 304_j has a pair of connectors (e.g. 166a, 166b of Figure 5B, 226a, 226b of Figure 8B), one of which is engaged with the primary dedicated

connector of the modular backplane segments 302_j while the other connector is engaged with the secondary dedicated connector of the modular backplane segment which is adjacent to the modular backplane segment 302_j. The modular backplane segments 302_K and 302_{K+1} (K=1, 2, 3) are communicatively connected by the bridge module 304_K.